

**R309-305. Certification Rules for Backflow Technicians.**

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## **R309-305. Certification Rules for Backflow Technicians.**

### ***R309-305-1. Purpose.***

These rules are established:

- (1) in order to promote the use of trained, experienced professional personnel in protecting the public's health; and
- (2) To establish standards for training, examination, and certification of those personnel involved with cross connection control program administration, testing, maintenance, and repair of backflow prevention assemblies. In addition to establishing standards for the instruction of Backflow Technicians.

### ***R309-305-2. Authority.***

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104(4)(a) of the Utah Code and in accordance with 63-46a of the same, known as the Administrative Rulemaking Act.

### ***R309-305-3. Extent of Coverage.***

These rules shall apply to all personnel who will be:

- (1) directly involved with the administration or enforcement of any cross connection control program being administered by a drinking water system; or
- (2) testing, maintaining and/or repairing any backflow prevention assembly; or
- (3) instructors within the certification program, regardless of institution or program.

### ***R309-305-4. Definitions.***

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

- (1) Backflow Technician - An individual who has met the requirements and successfully completed the course of instruction and certification requirements for Class I, II or III backflow technician certification as outlined herein.

- (a) Class I Backflow Technician is a Cross Connection Control Program Administrator.
  - (b) Class II Backflow Technician is a Backflow Assembly Tester.
  - (c) Class III Backflow Technician is a Backflow Instructor Trainer.
- (2) Class - means the level of certification of a Backflow Technician (Class I, II or III).
- (3) Performance Examination - means a closed book hands on demonstration of an individuals ability to conduct a field test on backflow prevention assemblies.
- (4) Proctor - means a Class III Technician authorized to administer the written or the performance examination.
- (5) Renewal Course - means a course of instruction, approved by the Commission, which is a prerequisite to the renewal of a Backflow Technician's Certificate.
- (6) Secretary to the Commission - means that individual appointed by the Executive Secretary to conduct the business of the Commission and to make recommendations to the Executive Secretary regarding backflow technician certification.
- (7) Written Examination - means the examination for record used to determine the competency and ability of applicants in understanding of the required course of instruction.

### ***R309-305-5. General Policies.***

- (1) Certification Application: Any individual may apply for certification.
- (2) Certification Classes: The classes of certificates shall be: Class I, Class II, and Class III.
- (a) Class I Backflow Technician - Cross Connection Control Program Administrator: This certificate shall be issued to those individuals who are directly involved in administering a cross connection control program, who have demonstrated their knowledge and ability by passing the certification examination.
    - (i) These individuals may NOT test, maintain or repair any backflow prevention assembly for record (except to insure proper testing techniques are being utilized within their jurisdiction).
    - (ii) These individuals may conduct plan/design reviews, hazard assessment investigations, compliance inspections, and enforce local laws,

codes, rules and regulations and policies within their jurisdictions, and offer technical assistance as needed.

(b) Class II Backflow Technician - Backflow Assembly Tester: This certificate shall be issued to those individuals who have demonstrated their knowledge and ability by passing the written and performance certification examinations and in addition having proven qualified and competent to test, maintain, and/or repair (see R309-305-5(3)(b)) backflow prevention assemblies (commercially as well as within their jurisdiction) by passing the practical examination.

(c) Class III Backflow Technician - Backflow Instructor Trainer: This certificate shall be issued to those individuals who have successfully completed a 3 year renewal cycle as a Class II Technician and in addition have proven qualified and competent to instruct approved Backflow Technician Certification classes by participating in and passing an approved Class III certification course.

(3) Certification Requirements: Those individuals seeking certification as a Backflow Technician must participate in an approved Technician's course of instruction and pass the examination required per class of certification.

(a) All individuals who instruct Backflow Technician training courses must hold a current Class III - Backflow Technician certificate.

(b) The issuance of a Backflow Technician certificate (Class I, II or III) does NOT authorize that individual to install or replace any backflow prevention assembly. The installation replacement or repair of assemblies must be made by a tester having appropriate licensure from the Department of Commerce, Division of Occupational and Professional Licensing, except when the Backflow Technician is an agent of the assembly owner.

### ***R309-305-6. Technician Responsibilities.***

(1) All technicians shall notify the Division of Drinking Water, local health department and the appropriate public water system of any backflow incident as soon as possible, but within eight hours. The Division can be reached during business hours at 801-536-4200 or after hours at 801-536-4123;

(2) All technicians shall notify the appropriate public water system of a failing backflow prevention assembly within five days;

(3) All technicians shall ensure that acceptable procedures are used for testing, repairing and maintaining any backflow prevention assembly;

(4) All technicians shall report the backflow prevention assembly test results to the appropriate public water system within 30 days;

- (5) All technicians shall include, on the test report form, any materials or replacement parts used to effect a repair or to perform maintenance on a backflow prevention assembly;
- (6) All technicians shall ensure that any replacement part is equal to or greater than the quality of parts originally supplied within the backflow prevention assembly and are supplied only by the manufacturer or their agent;
- (7) All technicians shall not change the design, material, or operational characteristics of the assembly during any repair or maintenance;
- (8) All technicians shall perform each test and shall be responsible for the competency and accuracy of all testing and reports thereof;
- (9) All technicians shall ensure the status of their technician certification is current; and
- (10) All technicians shall be equipped with and competent in the use of all tools, gauges, and equipment necessary to properly test, repair and maintain a backflow prevention assembly.

### ***R309-305-7. Examinations.***

(1) Exam Issuance: The examination recognized by the Commission for certification shall be issued through the Division of Drinking Water for both initial certification and renewal of certification.

If an individual fails an examination, the individual may file another application for reexamination on the next available test date.

- (a) Examinations (both written and performance) that are used to determine competency and ability shall be approved by the Cross Connection Control Commission prior to being issued.
- (b) Oral examinations may be administered to an individual who has failed to pass at least two consecutive written examinations. The oral examination shall be administered by at least one Commission member and two Class III Backflow Technicians. If the individual fails the examination, he shall be given written notification of those areas deficient.

(2) Exam Scoring: Class I, Class II and Class III Technician's must successfully complete a written exam with a score of 70% or higher. Class II Technician's must also successfully demonstrate competence and ability in the performance examination, for the testing of a Pressure Vacuum Breaker Assembly, a Spill-Resistant Pressure Vacuum

Breaker Assembly, a Double Check Valve Assembly, and a Reduced Pressure Principal Backflow Prevention Assembly.

(a) The performance examination shall be conducted by a minimum of two Class III Technicians.

(b) Each candidate must demonstrate competence and shall be evaluated by a proctor and assessed a pass or fail grade in each of the following areas.

(i) Properly identify backflow assembly

(ii) Properly identify test equipment needed

(iii) Properly connect test equipment

(iv) Test assembly

(v) Identify inaccuracies

(vi) Properly diagnose assembly problems

(vii) Properly record test results

The candidate must receive a pass grade from the proctor in all areas listed above for each assembly tested in order to pass the performance examination.

(c) An individual may apply for reexamination of either portion of the examination a maximum of two times. After a third failing grade, the individual must register for and complete another technician's course prior to any further reexamination.

(3) Class III Exam: Class III Technicians must participate in, and pass, a Class III Certification course, approved by the Cross Connection Control Commission, in addition to the successful completion of the Class II Technician's certification course.

### ***R309-305-8. Certificates.***

(1) Certificate Issuance: For a certificate to be issued, the individual must complete a Technician's training course and pass with a minimum score of 70% the written examination. For Class II and III certificates, passing marks on the performance examination shall also be required.

(2) Certificate Renewal: The Backflow Technician's certificate is issued by the Executive Secretary and shall expire December 31, three years from the year of issuance.

- (a) Backflow Technician certificates shall be issued by the Commission Secretary, by delegated authority from the Drinking Water Board.
  - (b) The Backflow Technician's certificate may be renewed up to six months in advance of the expiration date.
  - (c) To renew a Class I or II Technician certificate, the Technician must register and participate in an approved backflow prevention renewal course, and pass the renewal examination (minimum score of 70%) which shall include a performance portion for Class II Certification.
  - (d) To renew a Class III Technician certificate, the following criteria shall be met:
    - (i) In the 3 year certification period a total of three events from the following list shall be obtained in any combination:
      - (A) Instruction at a Commission approved backflow technician certification or renewal course.
      - (B) Serve as a proctor for the performance examination at a Commission approved backflow technician certification or renewal course.
    - (ii) Attendance at a minimum of two of the annual Class III coordination meetings or receive a meeting update from the Commission Secretary.
    - (iii) Attendance and successful review at a Class III renewal course, as approved by the Cross Connection Control Commission. The course would consist of presentation of a randomly picked topic in backflow prevention before a peer group of other Class III technicians, and a demonstration of knowledge of all the testing equipment available by a random selection of test equipment for the technician to perform the performance exam.
  - (e) Should the applicant fail the renewal written examination (minimum score of 70%), renewal of that existing license shall not be allowed until a passing score is obtained. If the applicant fails to pass the test after three attempts, the applicant shall be required to participate in an approved Backflow Technician's course before retaking the written and performance examinations. (Class I Technicians only need to pass the written examination.)
- (3) Certification Revocation: The Executive Secretary may suspend or revoke a Backflow Technician's certification, for good cause, including any of the following:



- (a) The certified person has acted in disregard for public health or safety;
- (b) The certified person has engaged in activities beyond the scope of their licensure through the Department of Commerce, Division of Professional Licensing (i.e. installation, or replacement of assemblies);
- (c) The certified person has misrepresented or falsified figures or reports concerning backflow prevention assembly or test results;
- (d) The certified person has failed to notify proper authorities of a failing backflow prevention assembly within five days, as required by R309-305-6(2);
- (e) The certified person has failed to notify proper authorities of a backflow incident for which the technician had personal knowledge, as required by R309-305-6(1);
- (f) The certified person has implemented a change of the design, material or operational characteristics of a backflow prevention assembly that is in use, and which has not been authorized by the Executive Secretary; or
- (g) Disasters or "Acts of God", which could not be reasonably anticipated or prevented, shall not be grounds for suspension or revocation actions.

### ***R309-305-9. Fees.***

- (1) Fees: The fees for certification shall be submitted in accordance with Section 63-38-3.2.
- (2) All fees shall be deposited in a special account to defray the costs of administering the Cross Connection Control and Certification programs.
- (3) Renewal Fees: The renewal fee for all classes of Technicians shall be in accordance with Section 63-38-3.2.
- (4) All fees shall be deposited in a special account to defray the cost of the program.
- (5) All fees are non-refundable.

### ***R309-305-10. Training.***

- (1) Training: Minimum training course curriculum, written tests and performance tests shall be established by the Commission and implemented by the Secretary of the Commission for both the Technician Class I and Class II courses and the renewal courses.

- (a) The length of the initial certification course for a Class I cross connection control program administrator shall be a minimum of 32 hours including examination.
- (b) The length of the initial certification course for a Class II backflow assembly tester shall be a minimum of 32 hours excluding examination.
- (c) The length of each renewal course shall be a minimum of 16 hours including the renewal examination (both written and performance examinations).

### ***R309-305-11. Cross Connection Control Commission.***

- (1) Appointment of Members: A Cross Connection Control Commission shall be appointed by the Drinking Water Board from nominations made by cooperating agencies.
- (2) Responsibility: The Commission is charged with the responsibility of conducting all work necessary to promote the cross connection program as well as recommending qualified individuals for certification, and overseeing the maintenance of necessary records.
- (3) Representative Agencies: The Commission shall consist of seven members:
  - (a) One member (nominated by the League of Cities and Towns) shall represent a community drinking water supply.
  - (b) One member (nominated by the Utah Pipes Trades Education Program) shall represent the plumbing trade and must be a licensed Journeyman Plumber.
  - (c) One member (nominated by the Utah Mechanical Contractors Association) shall represent the mechanical trade contractors.
  - (d) One member (nominated by the Drinking Water Board) shall represent the Drinking Water Board.
  - (e) One member (nominated by the Rural Water Association of Utah) shall represent small water systems.
  - (f) One member (nominated by the Utah Chapter American Backflow Prevention Association) shall represent Class II Backflow Technicians and shall be a Class II or III Backflow Technician.
  - (g) One member (nominated by the Utah Association of Plumbing and Mechanical Officials) shall represent plumbing inspection officials and shall be a licensed plumbing inspector.

(4) Term: Each member shall serve a two year term. At the initial meeting of the Commission, lots shall be drawn corresponding to two one and three two year terms. Thereafter, all Commission members' terms shall be on a staggered basis.

(5) Nominations of Members: All nominations of Commission members shall be presented to the Drinking Water Board, which reserves the right to refuse any nomination.

(6) Unexpired Term: An appointment to succeed a Commission member who is unable to complete his full term shall be for the unexpired term only, and shall be nominated to, and appointed by, the Drinking Water Board in accordance with R309-305-11(1).

(7) Quorum: At least four Commission members shall be required to constitute a quorum to conduct the Commission's business.

(8) Officers: Each year the Commission shall elect officers as needed to conduct its business.

(a) The Commission shall meet at least once a year.

(b) All actions taken by the Commission shall require a minimum of four affirmative votes.

### ***R309-305-12. Secretary of the Commission.***

(1) Appointment: The Executive Secretary of the Drinking Water Board shall appoint, with the consent of the Commission, a staff member to function as the Secretary to the Commission. This Secretary shall serve to coordinate the business of the Commission and to bring issues before the Commission.

(2) Duties: The Secretary's duties shall be to:

(a) act as a liaison between the Commission, certified Technicians, public water suppliers, and the public at large;

(b) maintain records necessary to implement and enforce these rules;

(c) notify sponsor agencies of Commission nominations as needed;

(d) coordinate and review all cross connection control programs, certification training and the certification of Backflow Technicians;

(e) serve as a source of public information for Certified Technicians, water purveyors, and the public at large;

(f) receive and process applications for certification;

(g) investigate and verify all complaints against or concerning certified Backflow Prevention Technicians, and advise the Executive Secretary of the Drinking Water Board regarding any enforcement actions that are being recommended by the Commission;

(h) develop and administer examinations;

(i) review and correct examinations.

(3) The Secretary to the Commission is also responsible for making recommendations to the Executive Secretary regarding backflow technician certification as provided in these rules.

KEY: drinking water, cross connection control, backflow assembly tester

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